



Science at Marshlands Primary School

Intent

Our science curriculum has been designed to encourage belonging, curiosity, enjoyment and resilience. During science, children work practically to plan, conduct and evaluate a range of investigations to improve their scientific understanding of the world. This enables our children to wonder and reason.

Big Ideas

- Asking Questions
- Observing & Measuring
- Investigating
- Recording & Presenting Results
- Answering Questions & Concluding
- Evaluating & Making Further Predictions
- Communicating Findings

Content & Sequencing

We use the objectives from the National Curriculum for science. As we work over a two year cycle, objectives are covered in a phase rather than a year group (KS2). Additional units have been added to ensure retention. This is documented in the school's Long Term Plan for science.

We have a progression of skills which progresses through the phases; over a two year period, pupils master the skills outlined. In the first year, the skills are more supported (through adaptation and scaffolding) and in the second year, pupils are expected to become more independent in carrying out the skills.

Other Subjects

Maths for data handling.

Writing for planning, evaluating and presenting findings.

Reading for using secondary sources.

Geography for Earth science.

History for how science has changed over time and to study significant people.

Teaching Strategies

Science is mostly practical and work is collated in a 'big book' rather than in individual work books.

Children work collaboratively to develop their scientific understanding.

Children are encouraged to question the world around them to inform their scientific discovery.

Learning is linked and applied to real life situations – when children investigate, we encourage their findings to the real world.

Retention

Making reference to the Big Ideas throughout teaching sequences. These are the scientific skills that pupils will build upon throughout school.

Recapping of previous teaching and low-stake quizzing so that pupils are encouraged to recall their learning.

We have developed a consistent practice for planning, conducting and evaluating investigations – this progresses across the phases.

Progress & Attainment

Big Ideas used to build on prior understanding.

End of units tasks are designed to show new knowledge and understanding.

Consistent approaches to scientific enquiry show ongoing assessment of pupils' scientific skills.

Twice per year, teachers make assessment judgements in science – are the children working towards, at or at a greater depth for the age-related expectations?

For each year group, an example of one child's work is documented as the basis of what age-related looks like.

Support

Everyone has access to the science curriculum.

Adaptations, when appropriate, are made to tasks to ensure all can access.

Where possible, pupils access the scientific content for their year group.

Should it be identified on a specific support plan following assessment with outside agencies, some pupils may access skills and knowledge from lower year groups.